Why Do Firms Adopt ESG-linked Pay? The Role of Bank Financing

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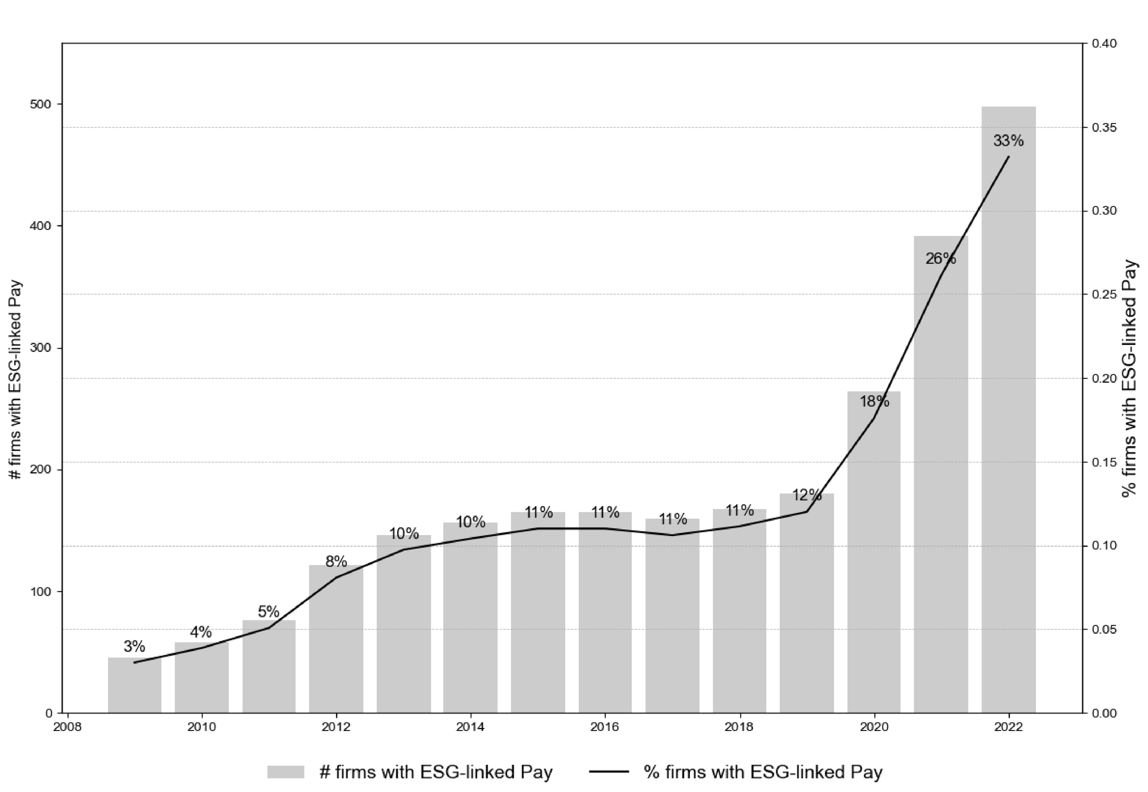
Abstract

We study whether and how shareholders strategically use executive compensation that includes ESG-related metrics (i.e., ESG-linked pay) as a commitment device to accommodate debtholders' non-financial preferences. Using exogenous variation from ESG disclosure mandates imposed on non-U.S. banks, we find that U.S. firms with pre-existing lending relationships with these banks are more likely to adopt ESG-linked pay. This effect is stronger for firms with higher switching costs to alternative lenders, lower costs of adjusting compensation contracts, weaker bargaining power in lending relationships, and poorer ESG performance. We also document that ESG disclosure mandates in the banking sector lead to more frequent loan renegotiations and negative stock market reactions among borrowing firms. Consistent with a commitment mechanism, ESG-linked pay is associated with subsequent improvements in ESG performance and firm value. Overall, our findings indicate that shareholders strategically restructure executive compensation in response to stakeholders' non-financial preferences and mitigate adverse effects on firm value.

Motivation & Research Question

Motivation

- **Strategic Use of Executive Compensation:**
  - Prior research confirms the strategic use of compensation as a response to corporate stakeholders with ***financial incentives*** (peers, competitors, suppliers, and debtholders).
  - However, it is unclear whether and how executive compensation adapts to corporate stakeholders' ***non-financial preferences***.
- **Widespread Use of ESG-linked Pay:**
  - ESG-linked pay is widespread, yet its adoption motives remain debated.



Percentage of S&P 1500 Firms with ESG-linked Pay

Research Question

Do firms use executive compensation as a commitment device to respond to corporate stakeholders' non-financial preferences? Specifically, do firms adopt ESG-linked pay to credibly commit to banks' ESG preferences?

Economic Story

The Wedge: Disclosure Mandates Drive Incentives Apart

Shareholder focus: Cash flow and firm value

Debtholder focus:
- Downside Risk (financial)
- ESG-related reputational and regulatory risk (non-financial)

Consequence: Shareholder Value Loss

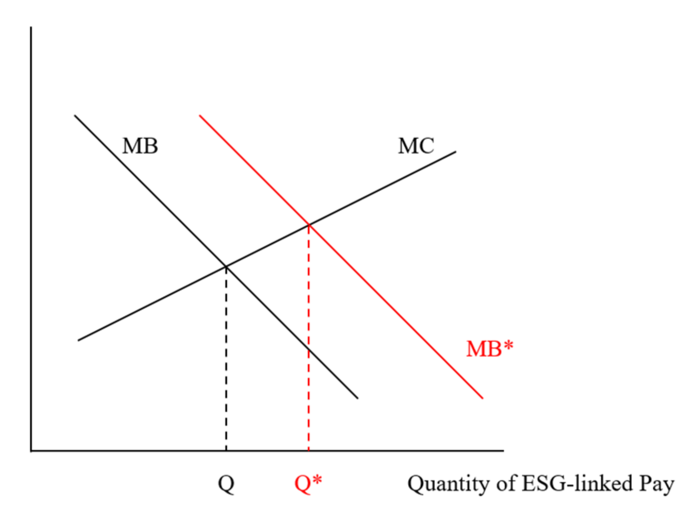
Banks with non-financial preferences anticipate that borrowers underinvest in ESG when no credible commitment:

↑ Cost of Debt → ↓ Shareholder Value

How can firms credibly reassure debtholders about their ESG commitment to mitigate shareholder value loss?

ESG-Linked Pay as a Commitment Device

- Theory: Debtholders price incentive misalignment inferred from executive compensation.
- Our Argument: ESG-linked pay is costly, observable and verifiable, thereby serving as a credible commitment.



- Marginal Benefit ↑
- Marginal Cost remains the same

Tension: Alternative Adjustments vs. ESG-linked Pay

Optimal response depends on:
- Severity of shareholder-debtholder ESG Divergence
- Relative Cost of Adjustment (ESG Pay vs. Alternatives)

Research Design

- Exogenous Variations: *Mandatory ESG disclosure regulations* imposed on non-U.S. banks.
  - The regulation requires banks to disclose ESG information in financial filings or standalone reports.
- Pre-existing Lending Relationships: Borrowing firms do not anticipate future regulations upon loan initiation.
- Stacked DiD Framework:

Loan Level: ESG Disclosure Mandates Regulation Year for non-U.S. banks — Define "***ESG-shock Loan***" • Originated pre-regulation • Outstanding post-regulation

Firm-Year Level: *Exposure = ESG-shock Loans / Total Foreign-Bank Loans*
Treated firms: the first year its exposure > 50%
Control firms: never across 50%

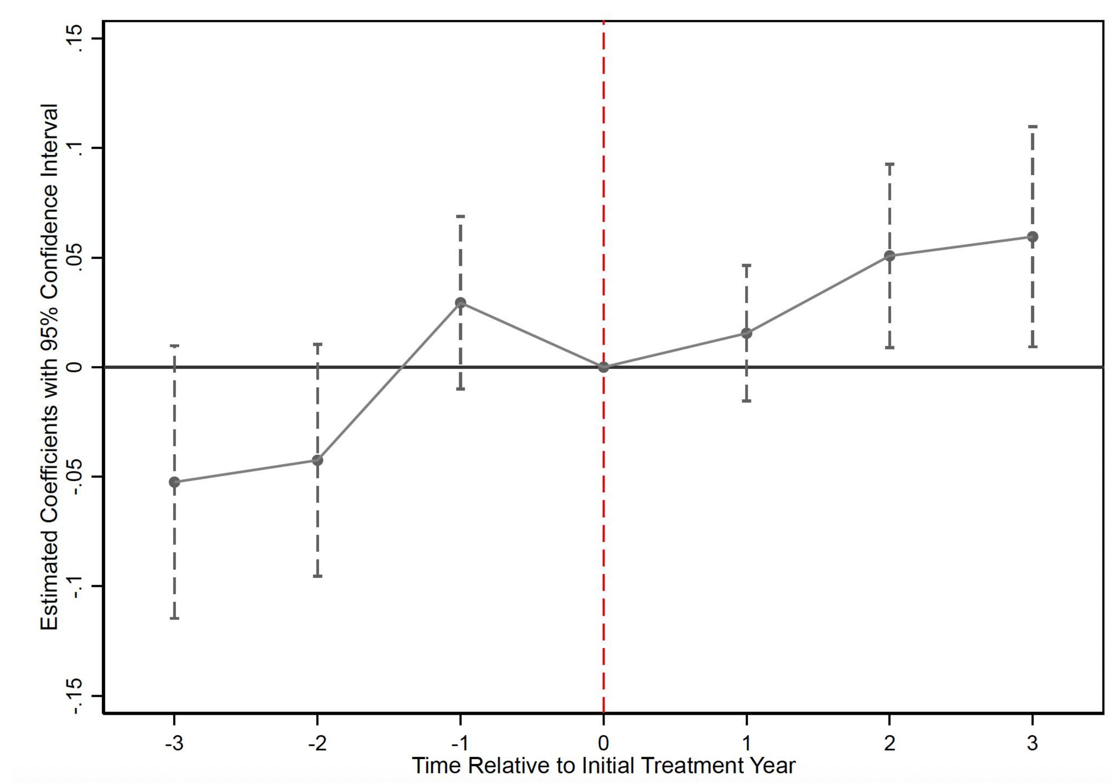
Cohort Level: A cohort includes: • Firms treated for the first time in the same year • Control firms — Event Window [−3, +3] — Stacked Cohorts

$$ESG\text{-}linked\ Pay_{c,i,t} = \alpha + \beta Treat_{c,i} \times Post_{c,t} + X_{c,i,t-1} + \lambda_{c,i} + \tau_{c,t} + \epsilon_{c,i,t}$$

- *ESG-linked Pay*: Dummy variable that takes one if the firm adopts ESG-linked pay in a given year.
- FE: Cohort × Firm Cohort × Year   Std Err: Firm-level

Main Results

- Firms are **more likely to adopt ESG-linked pay** when lending banks have non-financial ESG preference after mandatory ESG disclosure regulations.



Mechanism & Additional Tests

Cross-sectional Analyses

The main effect is stronger when borrowing firms have:
1) higher switching costs to new lenders,
2) lower implementation cost for compensation changes,
3) weaker bargaining power in the lending relationship, and
4) more negative ESG incidents.

Costs of Bank ESG Disclosure Mandates for Borrowers

Debt Contracting Effects of Bank ESG Disclosure Mandates
- Banks are more likely to amend loan contracts following ESG regulatory shock.

Capital Market Effects of ESG Disclosure Mandates
- Firms that have lending relationships with banks that are subject to EU NFR Directive (Oct 22, 2014) experience an average 3-day CAR of about **−0.8%.**

Marginal Benefit of ESG-linked Pay Increases
- Regulatory-induced wedge between shareholder and debtholder preference impose costs on borrowers.
- Shareholder have incentives to use ESG-linked pay as a commitment device and restore value loss.

Efficiency of ESG-linked as a Commitment Device

- ESG-linked pay adoption after the regulatory shock is associated improved ESG performance and shareholder value loss recovery.

Conclusion

- **Key Takeaways:** U.S firms are more likely to adopt ESG-linked pay as a credible commitment device when their lending banks are subject to ESG disclosure mandates.
- **Our Contributions**:
  - **Strategic Use of Executive Pay:** We highlight the strategic use of executive compensation when corporate stakeholders hold non-financial preferences.
  - **Policy Implications/Real Effects of Disclosure**: The banking sector transmits ESG pressure into the unregulated corporate economy.